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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,511	09/29/2006	Shinji Yasuhara	4731-0136PUS1	9948
2292 7590 07/08/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER NGUYEN, VU Q				
ART UNIT 3657		PAPER NUMBER		
NOTIFICATION DATE 07/08/2010		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/587,511

Applicant(s)

YASUHARA ET AL.

Examiner

VU Q. NGUYEN

Art Unit

3657

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3, 4, 6, 7, 10 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3, 4, 6, 7, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/29/2010 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3-4, 6-7, and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 recites the limitation "a coating material capable of being readily abraded or separated by using the chain" in line 3. It is unclear exactly what is imparted by this limitation. Exactly what kind of coating materials can be considered to be capable of being readily abraded or separated? Does the limitation impart more than just a certain coating material? Also, exactly what does the recitation of "readily" impart? In other words, what is the distinction between being abraded or separated, and being readily

abraded or separated? If the recitation of "readily" has to do with a degree of ease at which the coating material is abraded or separated, the Examiner submits that the term "readily" can be considered a relative term which renders the claim indefinite. The term "readily" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 6 is rejected for the same reasons as set forth above.

Claim 7 recites the limitation "a coating that is readily abraded or separated by using the chain" in line 7. The claim is rejected for reasons similar to those set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4, 6-7, and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5728021 (van Rooij) in view of U.S. Patent No. 6509099 (Urata).

Regarding claim 3, van Rooij discloses a power transmission chain (31) comprising: a plurality of link plates (33, 53) individually including through-holes (35, 37), and arranged as mutually overlapped in a thicknesswise direction thereof (see Figs.

3-4); a plurality of pins (45, 47) inserted through the through-holes for flexibly interconnecting the plurality of link plates.

Regarding claim 3, van Rooij does not disclose expressly the plurality of link plates having their side surfaces covered by a coating material capable of being readily abraded or separated by using the chain, and the coating material having a lubrication component.

Urata teaches applying a coating material to plates, the coating material (zinc-phosphate coating; see column 4, lines 1-14) capable of being readily abraded or separated (as best understood; see the 35 U.S.C. 112, 2nd paragraph rejection above; the Examiner submits that the zinc-phosphate coating is subject to wear and thus, can be said to be capable of being readily abraded or separated, at least to some degree) and having a lubrication component (see column 4, lines 19-21).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the plurality of link plates as taught by van Rooij to be covered by a coating material having a lubrication component as taught by Urata. The motivation for doing so, as taught by Urata, would have been to merely provide a surface treatment which offers, among other things, excellent corrosion resistance and lubrication (see column 2, lines 57-61).

Regarding claim 4, see Urata and column 8, lines 27-30 and 42-43 (see the disclosure of calcium or zinc stearate for the lubrication component).

Regarding claims 10-11, see Fig. 5 of van Rooij and column 4, lines 36-45 disclosing a power transmission assembly comprising pulleys having a pair of conical sheave surfaces (65, 67) opposing each other.

Regarding method claims 6-7, the Examiner submits that the method steps, as broadly recited, are met by meeting the structural limitations as set forth above.

Response to Arguments

Applicant's arguments filed 05/28/2010 have been fully considered but they are not persuasive.

Applicant argues that there is no support in Urata that the coating of Urata will be abraded or separated at least to some extent and, in fact, Urata states that the coating has excellent coating adhesiveness. To reiterate the response set forth in the Advisory Action mailed 06/15/2010, even with excellent coating adhesiveness, the Examiner submits that nothing in Urata suggests that the coating is permanently attached, and thus, depending on the degree of forces applied to the coating, is at least capable of being separated at some point. Furthermore, even assuming for a moment that the coating is not capable of being separated, nothing in Urata suggests that the coating is completely free from or impervious to wear. Thus, the Examiner submits that the coating is at least capable of being abraded to some extent.

Furthermore, in light of the originally filed specification at paragraph 0039, it appears that the coating material having the property of being readily abraded is attributed to the coating material bring formed by a zinc-phosphate coating process

followed by a stearate lubrication coating process. Urata discloses a zinc-phosphate coating (see column 4, lines 1-14) followed by a stearate lubrication coating (see column 4, lines 19-21 and column 8, lines 27-30 and 42-43). Thus, it is unclear how Applicant's coating material is distinct from Urata's coating material. Also see the rejections under 35 U.S.C. 112, 2nd paragraph with regard to such indefiniteness.

For at least these reasons, the Examiner maintains the rejection of the claims and submits that the coating material of Urata meets the relevant limitations of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VU Q. NGUYEN whose telephone number is (571) 272-7921. The examiner can normally be reached on Monday through Friday, 11:30 AM to 8:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. Q. N./
Examiner, Art Unit 3657

/Robert A. Siconolfi/
Supervisory Patent Examiner, Art
Unit 3657